

### **Abstract of the Disclosure**

In order to provide a filter device capable of maintaining stable optical characteristics for an extended period of time and to provide also a  
5 photosensor using the filter device, a photosensor having a filter function includes a filter device (1) having a colored glass filter (3) and configured for permitting transmission of light of a predetermined wavelength range including a detection target wavelength range and a light receiving device (2) for receiving the light transmitted through the filter device (1). The  
10 filter device (1) includes a first interference filter structure (4) comprised of a plurality of light transmitting layers (4a), (4b) stacked on each other, the first interference filter structure (4) being deposited on a face of the colored glass filter (3). The light receiving device (2) includes a semiconductor photodetector structure having one or more semiconductor layers, a light receiving area being formed in the one or more semiconductor layers within the semiconductor photodetector structure. The one or more semiconductor  
15 layers forming the semiconductor photodetector structure contain In<sub>x</sub>Al<sub>y</sub>Ga<sub>1-x-y</sub>N (0≤x≤0.21, 0≤y≤1).